

APPLICATION NO. 10/723526

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Claim 1 (Currently Amended): A semiconductor device comprising:
a semiconductor substrate;
source and drain electrodes, which are formed on the semiconductor substrate to make ohmic contact with the semiconductor substrate;
a T-shaped gate electrode, which is formed between the source and drain electrodes on the semiconductor substrate;
a first insulating layer formed on the semiconductor substrate and is in direct contact with the source electrode, the drain electrode and the T-shaped gate electrode;
a silica aerogel layer formed on the first insulating layer; and
a second insulating layer formed on the silica aerogel layer, the source electrode and the drain electrode, the second insulating layer including silica aerogel, the second insulating layer is directly coupled in contact with to the T-shaped gate electrode.

Claim 2 (Previously Presented): The semiconductor device of claim 1, wherein the first insulating layer is formed of silicon nitride and the second insulating layer formed of silica aerogel.

Claim 3 (Previously Presented): The semiconductor device of claim 2, wherein the silica aerogel layer has a thickness greater than the thickness of the first insulating layer.

Claim 4 (Previously Presented): The semiconductor device of claim 2, wherein the first insulating layer has a thickness of 100-1000 Å.

Claim 5 (Original): The semiconductor device of claim 1, wherein the silica aerogel layer has a thickness of 1000-3000 Å.

CLAIMS 6-12 (CANCELLED)